# SIEMENS

SIMATIC ET 200SP, DIGITAL INPUT MODULE, DI 8X 24VDC
SOURCE INPUT BA, FITS TO BU-TYPE A0, COLOR CODE CC02,



| General information | |
|---|---|
| Product type designation | ET 200SP, DI 8x24VDC SRC BA, VPE 1 |
| Firmware version | V1.0 |
| • FW update possible | Yes |
| usable BaseUnits | BU type A0 |
| Color code for module-specific color identification plate | CC02 |
| **Product function** | |
| • I&M data | Yes; I&M0 to I&M3 |
| **Engineering with** | |
| • STEP 7 TIA Portal configurable/integrated as of version | V13 / V13 |
| • STEP 7 configurable/integrated as of version | V5.5 SP3 / - |
| • PROFIBUS as of GSD version/GSD revision | GSD Revision 5 |
| • PROFINET as of GSD version/GSD revision | GSDML V2.3 |
| **Operating mode** | |
| • DI | Yes |
| • Counter | No |
| • Oversampling | No |

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| | |
|---|---|
| • MSI | No |

## Supply voltage

| | |
|---|---|
| Rated value (DC) | 24 V |
| permissible range, lower limit (DC) | 19.2 V |
| permissible range, upper limit (DC) | 28.8 V |
| Reverse polarity protection | Yes |

## Encoder supply

| | |
|---|---|
| Short-circuit protection | No |

## Power loss

| | |
|---|---|
| Power loss, typ. | 1.5 W |

## Address area

### Address space per module

| | |
|---|---|
| • Address space per module, max. | 1 byte |
| • Inputs | 1 byte |

## Hardware configuration

### Selection of BaseUnit for connection variants

| | |
|---|---|
| • 1-wire connection | BU type A0 |
| • 2-wire connection | BU type A0 |
| • 3-wire connection | BU type A0 with AUX terminals |
| • 4-wire connection | BU type A0 + external terminals |

## Digital inputs

| | |
|---|---|
| Number of digital inputs | 8 |
| m/p-reading | Yes; m-reading |
| Input characteristic curve in accordance with IEC 61131, type 1 | Yes |
| Input characteristic curve in accordance with IEC 61131, type 2 | No |
| Input characteristic curve in accordance with IEC 61131, type 3 | Yes |
| Pulse extension | No |

### Input voltage

| | |
|---|---|
| • Type of input voltage | DC |
| • Rated value (DC) | 24 V |
| • for signal "0" | 30 V to -5 V (reference potential is L+) |
| • for signal "1" | -11 V to -30 V (reference potential is L+) |

### Input current

| | |
|---|---|
| • for signal "1", typ. | 6 mA |

### Input delay (for rated value of input voltage)

#### for standard inputs

| | |
|---|---|
| — parameterizable | Yes; 0.05 / 0.1 / 0.4 / 0.8 / 1.6 / 3.2 / 12.8 / 20 ms (in each case + delay of 30 to 500 µs, depending on line length) |

| | |
|---|---|
| for interrupt inputs | |
| — parameterizable | No |
| for counter/technological functions | |
| — parameterizable | No |
| **Cable length** | |
| ● shielded, max. | 1 000 m |
| ● unshielded, max. | 200 m |

## Encoder

| | |
|---|---|
| **Connectable encoders** | |
| ● 2-wire sensor | Yes |
| — permissible quiescent current (2-wire sensor), max. | 1.5 mA |

## Isochronous mode

| | |
|---|---|
| Isochronous operation (application synchronized up to terminal) | No |

## Interrupts/diagnostics/status information

| | |
|---|---|
| Diagnostics | Yes |
| **Alarms** | |
| ● Diagnostic alarm | Yes |
| ● Hardware interrupt | No |
| **Diagnostic messages** | |
| ● Diagnostic information readable | Yes |
| ● Monitoring the supply voltage | Yes |
| — parameterizable | Yes |
| ● Monitoring of encoder power supply | No |
| ● Wire-break | No |
| ● Short-circuit | No |
| ● Group error | Yes |
| **Diagnostics indication LED** | |
| ● Monitoring of the supply voltage (PWR-LED) | Yes; green PWR LED |
| ● Channel status display | Yes; Green LED |
| ● for channel diagnostics | No |
| ● for module diagnostics | Yes; green/red DIAG LED |

## Potential separation

| | |
|---|---|
| **Potential separation channels** | |
| ● between the channels | No |
| ● between the channels and backplane bus | Yes |
| ● between the channels and the power supply of the electronics | No |

**Permissible potential difference**

| between different circuits | 75 V DC/60 V AC (base isolation) |
|---|---|
| **Isolation** | |
| Isolation tested with | 707 V DC (type test) |
| **Dimensions** | |
| Width | 15 mm |
| Height | 73 mm |
| Depth | 58 mm |
| **Weights** | |
| Weight, approx. | 28 g |
| **last modified:** | 14.05.2016 |